

## **REMARKS**

Claims 1-4 and 6-19 are pending in this application. By this Amendment, Applicants amend claims 1, 4 and 6 and cancel claim 5.

The Examiner's indication that claims 6-8 would be allowable if rewritten in independent form including all of the features of the base claim and any intervening claims, and that claims 10-19 are allowed in greatly appreciated.

Claims 1-5 and 9 were rejected under 35 U.S.C. 102(e) as being anticipated by Hatanaka (U.S. 6,229,404) This rejection is respectfully traversed.

Claim 1 has been amended to recite:

"A piezoelectric oscillator unit comprising:

a circuit substrate including a cavity provided therein and a wall provided around the cavity, the wall having a top surface with electrodes disposed thereon, the circuit substrate having an oscillatory circuit mounted in the cavity thereof;

a vibrator package overlaid on said circuit substrate, said vibrator package housing a piezoelectric member therein and said vibrator package having electrodes provided on the bottom surface thereof which are bonded to said electrodes provided on the top surface of the wall of said circuit substrate; and

an adhesive arranged between the top surface of said wall of the circuit substrate and the bottom surface of said vibrator package to bond said circuit substrate and said vibrator package together." (Emphasis added)

The Examiner alleged that Hatanaka teaches a crystal oscillator package with a circuit substrate 1, the vibrator/crystal package is overlaid on the substrate, circuit elements in a cavity, and paste/seal 19 is shown with high melting point. Applicants respectfully disagree.

In contrast, Hatanaka teaches a crystal oscillator including a circuit substrate 1 having a cavity defined in the bottom surface thereof in layers 1c and 1d to accommodate electronic components therein (see col. 6, lines 48-58), an oscillating element 2 mounted on the top surface of the circuit substrate 1 (NOT in the cavity defined in layers 1c and 1d), a seam member 36 which is bonded to a conductive sealing member 19 by wax (see col. 9, line 66 to col. 10, line 5). Therefore, although the

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sealing member 19 is provided on the top surface of the substrate 1, contrary to the Examiner's allegation, the sealing member 19 cannot be fairly construed as an adhesive arranged "to bond said circuit substrate and said vibrator package together", as recited in claim 1 of the present application. In fact, it is clearly the wax that bonds the seam members 36 to the substrate 1.

Furthermore, Hatanaka fails to teach any vibrator package, let alone a vibrator package having a bottom surface, and thus, certainly fails to teach or suggest a "vibrator package having electrodes provided on the bottom surface thereof which are bonded to said electrodes provided on the top surface of the wall of said circuit substrate" as recited in claim 1 of the present application. In contrast, Hatanaka merely teaches an oscillator element 2 that is directly attached to the top surface of the substrate as seen in Fig. 1.

Additionally, since the cavity of Hatanaka is provided on the bottom surface of the substrate 1 and the oscillating element 2 is not provided in the cavity but instead is clearly disposed on the top surface of the substrate 1, Hatanaka clearly fails to teach or suggest "a circuit substrate including a cavity provided therein and a wall provided around the cavity, the circuit substrate having an oscillatory circuit mounted in the cavity thereof" and "an adhesive arranged between the top surface of said wall of the circuit substrate and the bottom surface of said vibrator package to bond said circuit substrate and said vibrator package together" as recited in claim 1 of the present application.

Accordingly, Applicants respectfully submit that Hatanaka fails to teach or suggest the unique combination and arrangement of elements recited in claim 1 of the present application.

In view of the foregoing amendments and remarks, Applicants respectfully submit that claim 1 is allowable. Claims 2, 4 and 6-9 depend upon claim 1, and are therefore allowable for at least the reasons that claim 1 is allowable. Additionally, claims 10-19 have been allowed by the Examiner

In view of the foregoing Remarks, Applicants respectfully submit that this application is in condition for allowance. Favorable consideration and prompt allowance are respectfully solicited.

To the extent necessary, Applicant petitions the Commissioner for a Three-month extension of time, extending to April 11, 2002, the period for response to the Office Action dated October 11, 2001.

The Commissioner is authorized to charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1353.

Respectfully submitted,

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## **VERSION WITH MARKINGS SHOWING CHANGES MADE**

1. A piezoelectric oscillator unit comprising:

a circuit substrate <u>including a cavity provided therein and a wall provided around</u>
the cavity, the wall having a top surface with electrodes disposed thereon, the circuit substrate having an oscillatory circuit mounted [thereon] in the cavity thereof;

a vibrator package overlaid on said circuit substrate, said vibrator package housing a piezoelectric member therein and said vibrator package having electrodes provided on the bottom surface thereof which are bonded to <u>said</u> electrodes provided on the top surface of <u>the wall of</u> said circuit substrate; and

an adhesive arranged <u>between the top surface of said wall of the circuit substrate</u> and the bottom surface of said vibrator package to bond said circuit substrate and said vibrator package together.

- 4. A piezoelectric oscillator unit according to Claim 1, wherein the circuit substrate is defined by a multilayer ceramic substrate, and [includes a] the cavity is disposed at the approximate center thereof to mount components.
- 6. A piezoelectric oscillator unit according to Claim [5] 1, wherein said electrodes on the top surface of the wall are provided at four corners of the top surface of the wall, and external electrodes are provided at four corners of the bottom surface of the wall.